# AUAR Executive Summary

## What is the purpose of an Alternative Urban Areawide Review (AUAR)?

An AUAR helps the city to:

- Understand how different development scenarios will affect the environment
- Analyze cumulative impacts of anticipated development scenarios within a given geographic area
- Inform local planning and zoning decisions based on environmental analysis

AUARs consider the following topics:

- Land use
- Geology, soils, and topography/land forms
- Water resources
- Contamination/hazardous materials/wastes
- Fish, wildlife, plant communities, and sensitive ecological resources
- Historic properties
- Visual
- Air
- Noise
- Transportation
- Cumulative potential effects

Minnesota Rules outline the circumstances that require an AUAR update. Regardless of any significant changes, the AUAR must be updated every five years until all of the development in the area has been approved.

## What is being proposed on the Ford Site?

Ryan Companies US, Inc. (Ryan) is proposing to redevelop the 122-acre Ford Site, which is the location of a former Ford Motor Company assembly plant. The proposed development would include residential, retail/service, office/employment, and civic/institutional land uses. The Burg & Wolfson (Lunds & Byerlys) property and Canadian Pacific Railway property are also included in the *Ford Site Zoning and Public Realm Master Plan* (Ford MP), but there are currently no development proposals for those properties.

Two development scenarios, listed in the table below, are being evaluated through the Alternative Urban Areawide Review (AUAR) process. These scenarios and the study area are consistent with the Ford MP. The Ryan Development Scenario represents the density of the development proposed by Ryan on the Ford Site parcel. The Master Plan Maximum Development Scenario represents the maximum density allowed under the current master plan on all four parcels within the study area.

| Land Use | Ryan Development Scenario | Master Plan Maximum Development Scenario |
|---|---|---|
| Residential (dwelling units) | 3,800 | 4,000 |
| Retail and Service (square feet of gross floor area) | 150,000 | 300,000 |
| Office and Employment (square feet of gross floor area) | 265,000 | 450,000 |
| Civic and Institutional (square feet of gross floor area) | 50,000 | 150,000 |

## What potential impacts and mitigation did the AUAR identify?

The following table summarizes the potential impacts and mitigation strategies identified in the AUAR for all topics except transportation (for a discussion on transportation see pages 8-10). For the following topics, the potential impacts and mitigation strategies identified apply to both the Ryan Development Scenario and the Master Plan Maximum Development Scenario.

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Land use | • Both development scenarios are consistent with the adopted Ford MP.<br>• The dimensional standards for building heights stated in the Ford MP and underlying zoning districts (F2 Residential Mixed Low, F3 Residential Mixed Mid, F5 Business Mixed, and F6 Gateway) potentially exceed the Mississippi River Corridor Critical Area (MRCCA) requirements related to building heights.<br>• A portion of the AUAR study area is within the Minneapolis-St. Paul airport restriction zones. | • Any zoning inconsistencies for either development scenario, such as floor area ratio or building height, will be addressed through the City's variance and/or conditional use permit process.<br>• The developer must submit an aeronautical study (Form 7460-1) with the FAA for the proposed development within the airport restriction zones. |
| Geology, soils, and topography/land forms | • Asphalt and concrete crushing and grading activities within the study area are anticipated to begin in early spring of 2020. These construction activities will involve moving soil and/or excavation and have potential to cause erosion and sedimentation impacts to surface waters. | • Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control.<br>• The proposed development within the AUAR study area will require compliance with the Capitol Region Watershed District's and the City of Saint Paul's erosion and sediment control standards.<br>• The developer must acquire a National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for construction activity from the Minnesota Pollution Control Agency (MPCA) prior to initiating earthwork. |

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Surface water | • Wetlands may be impacted as a result of either the Master Plan Maximum Development Scenario or the Ryan Development Scenario due to building footprints and/or roadway configurations. | • Wetland impacts will be minimized and avoided to the extent practicable as a mass grading plan and specific development plans are created.<br>• Wetland impacts will be replaced at a minimum of a 2:1 replacement ratio with wetland replacement<br>• At minimum, a 25-foot unmanicured vegetative buffer is required around all non-impacted wetlands located within the AUAR study area. The wetland buffers will be incorporated into site design.<br>• The developer will apply for a Section 404 permit from the US Army Corps of Engineers for impacts to wetlands determined jurisdictional under Section 404 of the Clean Water Act.<br>• The developer will apply for a Wetland Conservation Act Replacement Plan Approval from Capitol Region Watershed District for wetland impacts. |
| Groundwater | • The depth to groundwater within the AUAR study area is 100 to 115 feet below the surface in the St. Peter Sandstone formation (uppermost aquifer).<br>• There are three sealed wells and 14 monitoring wells that remain on the 122-acre Ford Site. Groundwater monitoring wells abandonment has been requested from the MPCA by Ford Motor Company. | • Groundwater monitoring wells will be abandoned and sealed prior to construction within the AUAR study area per MPCA and Minnesota Department of Health MDH well sealing requirements. |

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Water Appropriation | • The water supply will be obtained from the municipal water supply system operated by Saint Paul Regional Water Services (SPRWS). Installation of additional public watermain within the study area will be required.<br>• The Ryan Development Scenario would require 663,800 gallons per day, and the Master Plan Maximum Development Scenario would require 746,600 gallons per day. SPRWS infrastructure has the existing capacity to supply either development scenario.<br>• Temporary dewatering may be required for construction or on an intermittent basis with either development scenario. | • The developer will apply for a permit from the MDH for watermain installation.<br>• Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater best management practices.<br>• The developer will apply for a Temporary Water Appropriations General Permit 1997-005 for construction dewatering from the Minnesota Department of Natural Resources (DNR) for construction dewatering. |
| Wastewater | • The Metropolitan Council Wastewater Treatment Plant currently treats approximately 178 million gallons per day (GPD), with a total capacity of up to 314 million GPD.<br>• The estimated daily flow for the Ryan Development Scenario is 0.586 million gallons per day (MGD), with an estimated peak flow of 0.072 MGD (less than 1 percent of existing capacity).<br>• The estimated daily flow for the Master Plan Maximum Development Scenario is 0.669 MGD, with an estimated peak flow of 0.082 MGD (less than 1 percent of existing capacity).<br>• The City of Saint Paul Sewer Utility Division has confirmed that the regional treatment facility and the wastewater collection system have sufficient long-term capacity to handle the additional wastewater flow generated by either development scenario. | • The developer will apply for a permit from the Metropolitan Council for a sanitary sewer extension and permit to connect. |

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Stormwater | • The quantity, quality, and discharge rate of stormwater runoff in the post-development conditions will be designed to improve water quality of runoff leaving the site and to prevent further sedimentation and erosion issues within Hidden Falls Creek. | • Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment.<br>• The primary method of stormwater treatment will be through the use of retention ponds and sand filtration basins for the removal of total phosphorus and total suspended solids.<br>• Stormwater will be conveyed by means of an underground storm sewer to designed stormwater management areas. Conveyance systems will be designed in accordance with acceptable industry standards and in conformance with jurisdictional requirements.<br>• Maintenance of the stormwater management areas will be performed by Saint Paul Public Works to ensure long term effectiveness of the facilities. |
| Contamination/hazardous materials/wastes | • Ford completed its remediation activities in January 2019, and the MPCA issued a Certificate of Completion for the site on May 15, 2019.<br>• Construction of either development scenario would generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities.<br>• Toxic or hazardous substances may be used during project construction and operations (e.g., petroleum products, hydraulic fluid, and chemical products such as sealants).<br>• The proposed development would generate new demands on solid waste management and sanitation services provided in the project area. | • Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be made available. Surplus materials will be properly removed from the property upon completion of use.<br>• A Construction Contingency Plan will be developed and submitted to the MPCA to address proper handling of any potential impacted soils or other regulated materials/wastes that may be encountered during construction. |

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Fish, wildlife, plant communities, and sensitive ecological resources | • No adverse impacts are anticipated to state-listed or federally-listed species. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species | • Effective erosion prevention and sediment control practices will be incorporated into any stormwater management plan and also must be implemented and maintained near the Mississippi River to protect listed mussel species in the river.<br>• Wildlife friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction. |
| Historic properties | • No adverse impacts to historic properties are reasonably foreseeable.<br>• Due to the highly disturbed nature of the site, no archaeological resources are anticipated within the 122-acre Ford Site parcel or the Burg & Wolfson (Lunds & Byerlys) property. The only areas of the AUAR study area that contain undisturbed or minimally disturbed soils are located on the Canadian Pacific Railway property. | • An archaeological survey will be required prior to development of the Canadian Pacific Railway property. |
| Visual | • Neither development scenario will have an impact on any identified significant public views.<br>• The site lighting for the proposed development scenarios will be consistent with the lighting requirements identified in the Ford MP.<br>• Visual impacts are not anticipated to affect historic properties or districts. | • None identified. |

| Topic | Potential Impacts | Mitigation Strategies |
|---|---|---|
| Air | • The proposed development will generate temporary fugitive dust emissions during construction. | • Temporary dust emissions will be controlled by sweeping, watering, sprinkling, or applying calcium chloride, as appropriate or as prevailing weather and soil conditions dictate.<br>• In accordance with Saint Paul City Ordinances (Section 221.02), during construction of the proposed development contractors will maintain streets, alleys, sidewalks, or other public places adjacent to construction, demolition, or building sites free from dust, litter, or other matter originating from their construction, demolition, or building sites, including that effected by erosion and landslides. |
| Noise | • Construction activities may result in temporarily elevated noise levels. | • Construction activities (i.e., blasting, pile-driving, crushing, and grading activities) will be conducted in compliance with the City of Saint Paul Noise regulations to minimize noise levels and nighttime construction activities.<br>• Permits related to construction noise will be obtained from the City prior to the start of construction. |
| Cumulative potential effects | • No reasonably foreseeable future projects that may interact with the environmental effects of the Ford Site have been identified other than the Burg & Wolfson (Lunds & Byerlys) and Canadian Pacific Railway property, which are included in the AUAR study area and analyses. | • Because no reasonably foreseeable future projects have been identified, there is no known potential for cumulative effects. Impacts from future developments adjacent to the study area will be addressed via the regulatory permitting and approval processes and will be individually mitigated to ensure minimal cumulative impacts occur. |

# What were the results of the transportation analysis?

In accordance with EQB guidance, an independent traffic analysis was completed. Based on the detailed findings of the Ford Site AUAR Transportation Analysis, the area transportation network is expected to be able to support redevelopment within the AUAR study area. The AUAR Transportation Analysis also identifies certain traffic improvements that may be implemented over time to address future traffic impacts that could occur as a result of development within the AUAR study area. The AUAR Transportation Analysis covers key traffic metrics for both motorized and non-motorized modes. Metrics for motorized modes include intersection level of service (LOS) and length of queuing. For non-motorized modes, metrics include an analysis of gaps in the existing bicycle and pedestrian facility networks and availability of transit within the existing transportation network.

## Traffic

### Intersection Capacity Analysis

An intersection capacity analysis was conducted to determine how traffic is currently operating at the study intersections during typical weekday a.m. and p.m. peak hour conditions. All intersections were analyzed using Synchro/SimTraffic software, which is an industry standard. Capacity analysis results identify a level of service (LOS), which indicates how well an intersection is operating. Intersections are graded from LOS A through LOS F. The LOS results are based on average delay per vehicle, which corresponds to the delay threshold values shown in the table below. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through D is generally considered acceptable within the Twin Cities Metropolitan Area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well. In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities.

| LOS Designation | Signalized Intersection Average Delay/Vehicle (seconds) | Unsignalized Intersection Average Delay/Vehicle (seconds) |
|---|---|---|
| A | ≤ 10 | ≤ 10 |
| B | > 10 - 20 | > 10 - 15 |
| C | > 20 - 35 | > 15 - 25 |
| D | > 35 - 55 | > 25 - 35 |
| E | > 55 - 80 | > 35 - 50 |
| F | > 80 | > 50 |

Based on the results of the study and the estimated traffic generated by the proposed development scenarios within the AUAR study area, a limited number of intersections may operate at less than LOS D; none of the intersections are anticipated to operate below LOS E.[1]

[11] Traffic counts occurred on Thursday, May 9, Wednesday May 15, or Thursday May 16. All schools were still in session during the counts.

| Issue | Traffic Improvement | 2040 Ryan Development Scenario | 2040 Master Plan Maximum Development Scenario |
|---|---|---|---|
| **Ford Parkway/Mount Curve Boulevard** | | | |
| Side-street delays | 1) Signalize/turn lane improvements | X | X |
| **Ford Parkway/Cretin Avenue** | | | |
| Southbound queues | 1) Modify signal timing and phasing<br>2) Extend eastbound and westbound left-turn lanes<br>3) Restrict parking to Pinehurst/Highland and restripe segment | X | X |
| | 4) Construct southbound right turn lane | N/A | X |
| **Ford Parkway/Cleveland Avenue** | | | |
| Intersection operations and queues | 1) Extend eastbound left turn lane<br>2) Remove parking and provide a southbound right turn lane | X | X |
| **Ford Parkway/Fairview Avenue** | | | |
| Left turn operations and queues | 1) Provide left turn signal phasing | X | X |
| Intersection operations and queues | 2) Construct southbound right turn lane | X | X |
| | 3) Implement TDM strategies and refine land use guidance[2] | N/A | X |
| **Cleveland Avenue/Montreal Avenue** | | | |
| Travel pattern changes | 1) Switch side-street stop control to north/south approach or install all-way stop control<br>2) Construct intersection for potential future signal[2] | X | X |
| **Saint Paul Avenue/Montreal Avenue** | | | |
| Intersection operations and queues | 1) Install traffic signal/turn lanes or hybrid roundabout | X | X |
| **Cretin Avenue/Randolph Avenue** | | | |
| Intersection queues | 1) Provide northbound/southbound left turn lanes | X | X |

## Pedestrians and Bicycles

By resolution, the City of Saint Paul formally adopted a sidewalk infill policy in 2017 providing for the construction of sidewalks on both sides of every street as part of street construction projects. The City's adopted Pedestrian Plan (adopted June 5, 2019) reiterates the sidewalk in-fill policy and further requires

[2] For the Maximum Development Scenario, relocating density to the southern portion of study area could impact timing of the potential signal at the Cleveland Avenue/Montreal Avenue intersection

private property owners to install sidewalk adjacent to all streets abutting properties undergoing site redevelopment. It is therefore expected that these gaps will be in-filled over time.

The City of Saint Paul Bicycle Plan identifies the existing and planned bicycle facilities, including several bikeway priorities serving the AUAR study area.

| Roadway | Existing Facility | Planned Facility (per Saint Paul Bicycle Plan) |
|---|---|---|
| **Ford Parkway** | Bike lanes (east of Kenneth/Howell) | Enhanced shared/in-street lanes |
| **Cleveland Avenue** | Bike lanes (north of Eleanor Avenue) | Enhanced shared/in-street lanes |
| **Saint Paul Avenue** | None | In-street lanes |
| **Edgcumbe Road** | None | In-street lanes |
| **Highland Parkway** | None | Enhanced shared lanes |
| **Montreal Avenue** | Bike lanes (east of Fairview); enhanced shared lanes (west of Fairview) | Enhanced shared/in-street lanes |
| **Mississippi River Boulevard** | Bike lane (southbound); shared use path | Off-street path/in-street lanes |
| **Fairview Avenue** | Striped shoulders | In-street lanes |